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Protein Q8YSA0_ANASP

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General information about the UniProt/TrEMBL entry

Entry name

Q8YSA0_ANASP

Primary accession number

Q8YSA0

Entered in TrEMBL

Release 20, 01-MAR-2002

Sequence was last modified

Release 20, 01-MAR-2002

Annotations were last modified

Release 26, 01-MAR-2004

Protein description

Protein name

Beta-carotene ketolase

Origin of the protein

Gene

Locus names

alr3189

From

Anabaena sp. (strain PCC 7120)[TaxID:103690]

Taxonomy

Bacteria; Cyanobacteria; Nostocales; Nostocaceae; Nostoc.

References

[1]

NUCLEOTIDE SEQUENCE.
MEDLINE=21595285; PubMed=11759840; [NCBI, Expasy, EBI, Israel, Japan]
Kaneko T., Nakamura Y., Wolk C.P., Kuritz T., Sasamoto S.,
"Complete genomic sequence of the filamentous nitrogen-fixing cyanobacterium Anabaena sp. strain PCC 7120.",
DNA Res. 8:205-213(2001).

Cross-references				
EMBL	AP003592; BAB74888.1; -; Genomic_DNA.[EMBL/ GenBank/ DDBJ] [CodingSequence]			
PIR	AF2204; AF2204.			
GO	Cellular component	membrane	GO:0016020	inferred from electronic annotation
	Molecular function	oxidoreductase activity, acting on paired donors, with oxidation of a pair of donors resulting in the reduction of molecular oxygen to two molecules of water	GO:0016717	inferred from electronic annotation
	Molecular function	oxidoreductase activity, acting on single donors with incorporation of molecular oxygen	GO:0016701	inferred from electronic annotation
	Biological process	carotene metabolism	GO:0016119	inferred from electronic annotation
	Biological process	carotenoid biosynthesis	GO:0016117	inferred from electronic annotation
	Biological process	fatty acid desaturation	GO:0006636	inferred from electronic annotation
	[QuickGO]			
	InterPro	IPR011393; Carotene_ketolas. IPR005804; Fa_desat. IPR010257; FA_desat_sub. Graphical view of the domain structure		
Pfam	PF00487; FA_desaturase; 1. Pfam graphical view of domain structure			
PIRSF	PIRSF027840; Carotene_ketolas; 1.			
ProDom	PD001081; FA_desat_sub; 1. [Domain structure/ List of seq. sharing at least 1 domain]			
Keywords				
	Complete proteome			
Sequence information				
Length	258 AA			
Molecular weight	30313 Da			

CRC64	8F8C8E4ECF8EF61B	[This is a checksum on the sequence]
-----+-----+-----+-----+-----+-----+		
MVQCQPSSLH	SEKLVLLSST	IRDDKNINKG IFIACFILFL WAISLILLLS 50
IDTSIIHKSL	LGIAMLWQTF	LYTGLFITAH DAMHGUVYPK NPRNNFIGK 100
LTILLYGLLP	YKDCLKKKWL	HGHHPGTDL D PDYNGHPQN FFLWYLHFMK 150
SYWRWTQIFG	LVMTFHGLKN	LVHIPENNLI IFWMIPSILS SVQLFYFGTF 200
LPHKKLEGGY	TNPHCARSTP	LPLFSWFVTC YHFGYHKHEHH EYPQLPWMKL 250
PEAHKISL		258

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